In the Claims:

Please cancel Claim 1, without prejudice, and amend Claim 2 as follows such that the Claims read as set forth below.

1. Canceled, without prejudice.

2. (Currently Amended) An image forming apparatus for forming an image in a plurality of image forming modes, comprising:

an image reading section for reading a document;

an image forming section for forming an image based on image data of the document read; and

first setting means for setting respective input/output characteristic values corresponding to the plurality of image forming modes based on reference image data generated by reading a reference document having a tone pattern formed thereon;

~~The image forming apparatus as set forth in Claim 1,~~

wherein:

said plurality of image forming modes include a first image forming mode for forming an image by reading an ordinary document, and a second image forming mode for forming an image by reading a duplicate document which was copied in said image forming section, and

said first setting means sets a first input/output characteristic value, which is used in the first image forming mode, and a second input/output characteristic value, which is used in the second image forming mode, by reading the reference document in said image reading section.

3. (Original) The image forming apparatus as set forth in claim 2, wherein said first setting means creates the first input/output characteristic value by comparing first image data, which has been created by reading the reference document in said image reading section, and a pre-stored target value, and creates the second input/output characteristic value by comparing the target value, and second image data, which is compensated data of the first image data, using a pre-stored fixed value which corresponds to a difference in the respective input/output characteristic values.

4. (Original) The image forming apparatus as set forth in claim 2, further comprising:
second setting means for outputting the reference image data to said image forming section based on the first input/output characteristic value, and setting the second input/output characteristic value based upon a duplicate reference document, which is a copy of the reference document made by said image forming section.

5. (Original) The image forming apparatus as set forth in claim 2, further comprising:
an operating section, which is adapted to adjust the second input/output characteristic value when setting the second input/output characteristic value, which is used in the second image forming mode.

6. (Original) The image forming apparatus as set forth in claim 4, comprising:
detecting means for detecting a pattern indicative of setting the second input/output characteristic value, formed on the reference document,
wherein said second setting means sets the second input/output characteristic value when the pattern is detected.

7. (Original) The image forming apparatus as set forth in claim 6, comprising:
adding means for adding the pattern on the duplicate reference document for re-reading, which was created by the reference image data, to output the duplicate reference document with the pattern, when setting the second input/output characteristic value, which is used in the second image forming mode.

8. (Original) The image forming apparatus as set forth in claim 7, wherein said adding means adds the pattern on a front end portion in a transport direction of the duplicate reference document for re-reading.

9. (Original) The image forming apparatus as set forth in claim 6, comprising:
prohibiting means for prohibiting setting the second input/output characteristic value when the pattern was not detected.

10. (Original) The image forming apparatus as set forth in claim 4, wherein said second setting means creates and sets the second input/output characteristic value by comparing third reference image data, which is obtained by reading the duplicate reference document by said image reading section, and the pre-stored target value.

11. (Original) An image processing method of an image processing apparatus for forming an image in a plurality of image forming modes and having input/output characteristic values respectively corresponding to the plurality of image forming modes, said method comprising the steps of:
reading a reference document having a tone pattern formed thereon, as reference image data;
setting a first input/output characteristic value, which corresponds to the first image forming mode, from a pre-set target value for setting an input/output characteristic value and from the reference image data; and
creating pseudo reference image data from the reference image data using a fixed value which corresponds to a difference in the respective input/output characteristic values, so as to set a second input/output characteristic value, which corresponds to a second image forming mode, from the pseudo reference image data and the pre-set target value.